

**Production (NRND)**

**Product Status** Recommended Alternate Part No. : [C3216X7R1H105K160AB](#) (Interchangeability is not guaranteed.)

**TDK Item Description** C3216X7R1E105MT\*\*\*\*

**Applications** Commercial Grade  
Please refer to Part No. [CGA5L2X7R1E105M160AA](#) for Automotive use.

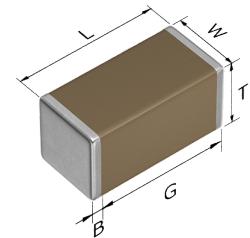
**Feature** General (Up to 75V)

**Series** C3216 [EIA 1206]

**Brand** TDK

**Environmental Compliance**

-  RoHS
-  REACH
-  Halogen Free
-  Lead Free

**Size**

Length(L)	3.20mm $\pm 0.20$ mm
Width(W)	1.60mm $\pm 0.20$ mm
Thickness(T)	0.85mm $\pm 0.15$ mm
Terminal Width(B)	0.20mm Min.
Terminal Spacing(G)	1.00mm Min.
Recommended Land Pattern (PA)	2.10mm to 2.50mm(Flow Soldering) 2.00mm to 2.40mm(Reflow Soldering)
Recommended Land Pattern (PB)	1.10mm to 1.30mm(Flow Soldering) 1.00mm to 1.20mm(Reflow Soldering)
Recommended Land Pattern (PC)	1.00mm to 1.30mm(Flow Soldering) 1.10mm to 1.60mm(Reflow Soldering)

**Electrical Characteristics**

Capacitance	1 $\mu$ F $\pm 20\%$
Rated Voltage	25VDC
Temperature Characteristic	X7R( $\pm 15\%$ )
Dissipation Factor (Max.)	3%
Insulation Resistance (Min.)	500M $\Omega$

**Other**

Operating Temp. Range	-55 to 125°C
Soldering Method	Wave (Flow) Reflow
AEC-Q200	NO
Packing	Embossed (Plastic)Taping [180mm Reel]
Package Quantity	4000pcs

! Images are for reference only and show exemplary products.

! This PDF document was created based on the data listed on the TDK Corporation website.

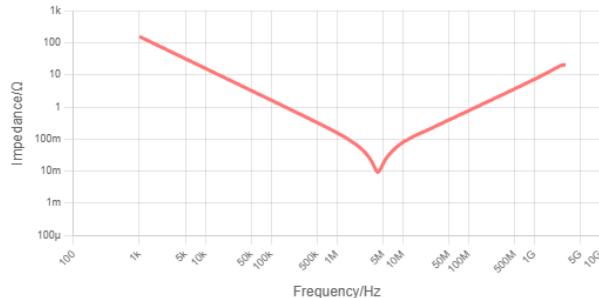
! All specifications are subject to change without notice.

FIT (Failure In Time)

This will be displayed when you [login](#) to myTDK

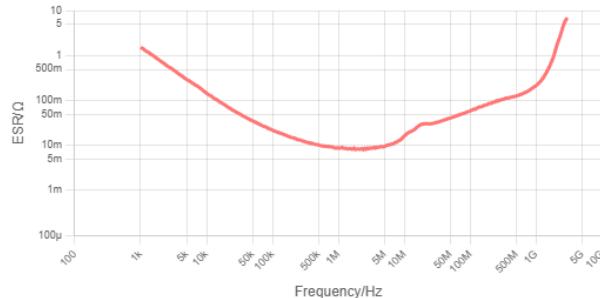
## Characteristic Graphs (This is reference data, and does not guarantee the products characteristics.)

## Impedance



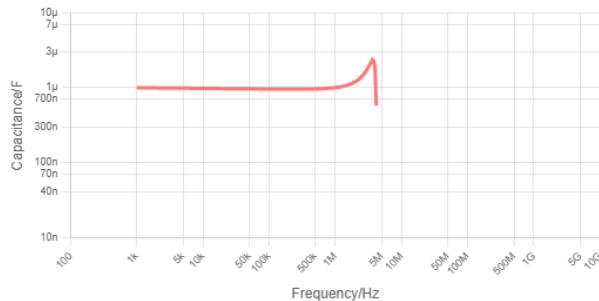
C3216X7R1E105M085AA

## ESR



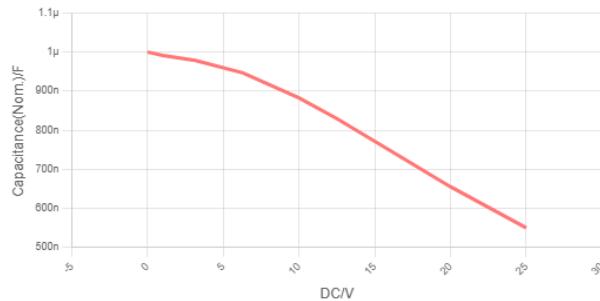
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## Capacitance



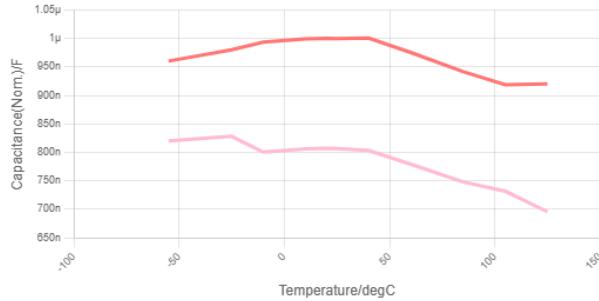
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## DC Bias Characteristic



C3216X7R1E105M085AA

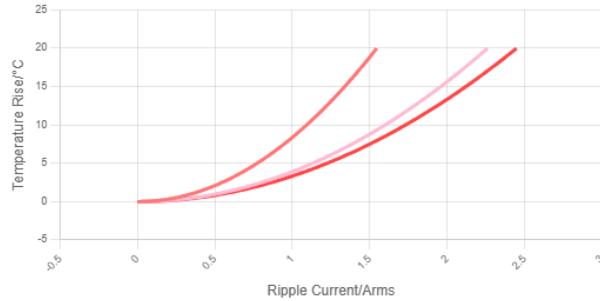
## Temperature Characteristic



C3216X7R1E105M085AA (No Bias)

C3216X7R1E105M085AA (DC Bias = 12.5V)

## Ripple Temperature Rising



C3216X7R1E105M085AA (100kHz)

C3216X7R1E105M085AA (500kHz)

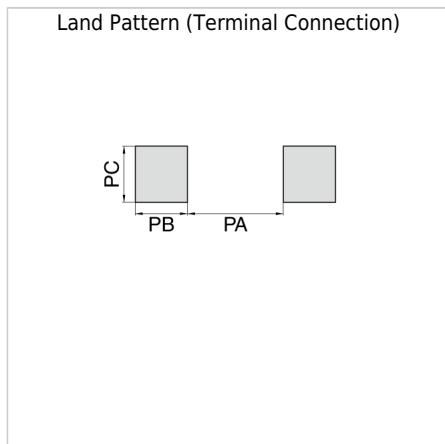
C3216X7R1E105M085AA (1MHz)

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## Associated Images



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